



OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Date Issued: August 5, 2009

Permit Number:
559215

Date Expires: July 1, 2014

Issued To:

Vacumet Corporation, Metallized Paper Division

Installation Address:

5705 Commerce Boulevard
Morristown

Installation Description:

32-0169-01 Faustel Paper and Film Coating Line
32-0169-04 Magnagraphics Metallized Paper Coating Line

Emission Source Reference No.: 32-0169

Renewal Application Due Date:

Between October 25, 2013 and January 23, 2014

Primary SIC: 26

Responsible Official:

Name: Keith Horvath
Title: Facility Manager

Facility Contact Person:

Name: Keith Horvath
Title: Facility Manager
Phone: (423) 585-1282

Information Relied Upon:

Application dated April 05, 2006
Administrative amendment application dated October 27, 2006
Letter dated January 20, 2009
Administrative amendment application dated July 28, 2009

(continued on the next page)


TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST AT INSTALLATION ADDRESS

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SECTION E

SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

32-0169 **Source Description:** Vacumet Corporation, Metallized Paper Division is a paper and film coating operation.

Conditions E1 through E3 apply to all sources in Section E of this permit unless otherwise noted.

E1. Fee payment: allowable emissions basis.

FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE 32-0169

REGULATED POLLUTANTS	ALLOWABLE EMISSIONS (tons per AAP)	ACTUAL EMISSIONS (tons per AAP)	COMMENTS
PARTICULATE MATTER (PM)	8.41	N/A	
PM₁₀	N/A	N/A	
SO₂	0.05	N/A	
VOC	245	N/A	Includes all fee emissions.
NO_x	9.5	N/A	
CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAP WITHOUT A STANDARD)*			
VOC FAMILY GROUP	N/A	AEAR	Fee emissions are included in VOC above.
NON-VOC GASEOUS GROUP	N/A	N/A	
PM FAMILY GROUP	N/A	N/A	
CATEGORY OF SPECIFIC HAZARDOUS AIR POLLUTANTS (HAP WITH A STANDARD)**			
VOC FAMILY GROUP	N/A	N/A	
NON-VOC GASEOUS GROUP	N/A	N/A	
PM FAMILY GROUP	N/A	N/A	
CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***			
EACH NSPS POLLUTANT NOT LISTED ABOVE	N/A	N/A	

NOTES

AAP The Annual Accounting Period (AAP) is a twelve (12) consecutive month period that begins each July 1st and ends June 30th of the following year. The present Annual Accounting Period began July 1, 2009 and ends June 30, 2010. The next Annual Accounting Period begins July 1, 2010 and ends June 30, 2011.

N/A N/A indicates that no emissions are specified for fee computation.

AEAR AEAR indicates that an Actual Emissions Analysis is Required to determine the actual emissions of:

- (1) each regulated pollutant (Particulate matter, SO₂, VOC, NO_x and so forth. See TAPCR 1200-3-26-.02(2)(i) for the definition of a regulated pollutant.),
- (2) each pollutant group (VOC Family, Non-VOC Gaseous, and Particulate Family), and
- (3) the Miscellaneous HAP Category under consideration during the Annual Accounting Period.

* **Category Of Miscellaneous HAP (HAP Without A Standard):** This category is made-up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the VOC Family group, the Non-VOC Gaseous group, or the Particulate (PM) Family group. For fee computation, the Miscellaneous HAP Category is subject to the 4,000 ton cap provisions of subparagraph 1200-3-26-.02(2)(i).

- ** Category Of Specific HAP (HAP With A Standard):** This category is made-up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-3-11 or Chapter 1200-3-31. Each individual hazardous air pollutant is classified into one of three groups, the **VOC Family** group, the **Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation**, each individual hazardous air pollutant of the **Specific HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-3-26-.02(2)(I).
- *** Category Of NSPS Pollutants Not Listed Above:** This category is made-up of each New Source Performance Standard (NSPS) pollutant whose emissions are not included in the PM, SO₂, VOC or NO_x emissions from each source in this permit. **For fee computation**, each NSPS pollutant not listed above is subject to the 4,000 ton cap provisions of subparagraph 1200-3-26-.02(2)(i).

END NOTES

- The permittee shall:**
- (1) Pay major source annual allowable based emission fees, as requested by the responsible official, in accordance with the above Fee Emissions Summary Table for the current annual accounting period that began in July 1, 2009.
 - (2) Prepare an **actual emissions analysis** for the current annual accounting period that began July 1, 2009 in accordance with the above **Fee Emissions Summary Table**. The **actual emissions analysis** shall include:
 - (a) the completed **Fee Emissions Summary Table**,
 - (b) each **AEAR** required by the above **Fee Emissions Summary Table**, and
 - (c) the records or summary of records required by Condition E3-5 of this permit. These records shall be used to complete the **AEARs** required by the above **Fee Emissions Summary Table**.
 - (3) Submit the **actual emissions analysis** no later than 90 days after the end of each annual accounting period.

The Tennessee Air Pollution Control Division will bill the permittee no later than April 1 prior to the end of each **annual accounting period**. The annual emission fee is due July 1 following the end of each **annual accounting period**. If any part of any fee imposed under TAPCR 1200-3-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-3-26-.02(8). Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

Payment of the fee due and the actual emissions analysis shall be submitted to The Technical Secretary at the address in Condition E2(b) of this permit.

TAPCR 1200-3-26-.02 (3) and (9), and 1200-3-9-.02(11)(e)1 (iii) and (vii)

E2. Reporting requirements.

a). Semiannual reports. The first report since issuance of this permit renewal shall cover the 6-month period from, September 1, 2009 to March 31, 2010, and shall be submitted within 60 days (**due date May 31, 2010**) after the 6 month period ending March 31, 2010. Subsequent reports shall be submitted within 60 days after the end of each 6-month period following the first report. These semiannual reports shall include:

- (1) Any monitoring and recordkeeping required by **Conditions E3-5, E4-1, E4-3, E4-5, E4-9, E4-10 and E5-4** of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (2) The visible emission evaluation readings from **Condition E3-2** of this permit if required. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (3) Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.

These reports must be certified by a responsible official consistent with Condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2(b) of this permit.

TAPCR 1200-3-9-.02(11)(e)1.(iii)

b). **Annual compliance certification.** The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

1. The identification of each term or condition of the permit that is the basis of the certification;
2. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
3. Whether such method(s) or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
4. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in **E2(b)(2)** above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and
5. Such other facts as the Technical Secretary may require to determine the compliance status of the source.

* "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

The first certification since issuance of this permit renewal shall cover the 12-month period from April 1, 2009 to March 31, 2010 and shall be submitted within 60 days (due date: May 31, 2010) after the 12-month period ending March 31, 2010. Subsequent certifications shall be submitted within 60 days after the end of each 12-month period following the first certification.

These certifications shall be submitted to: **TN APCD and EPA**

The Technical Secretary and
Division of Air Pollution Control
ATTN: East Tennessee Permit Program
9th Floor, L & C Annex
401 Church Street
Nashville, Tennessee 37243-1531

Air and EPCRA Enforcement Branch
US EPA Region IV
61 Forsyth Street, SW
Atlanta, GA 30303

TAPCR 1200-3-9-.02 (11)(e)3.(v)

E3. General Permit Requirements.

- E3-1.** Purchase orders and/or invoices or a record of purchase orders and/or invoices for all VOC and HAP containing materials along with material safety data sheets must be maintained and kept available for inspection by the Technical Secretary or his representative. These records must be retained for a period not less than five years.
- E3-2.** Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-3-5-.03(6) and TAPCR 1200-3-5-.01(1)

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated September 12, 2005, that is enclosed as Attachment 1.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

E3-3. VOC/HAP/WATER & EXEMPT COMPOUND CONTENT LOG.

Determinations of the as-supplied volatile organic compounds (VOC), hazardous air pollutants (HAP) including volatile hazardous air pollutants (VHAP), water & exempt compound containing materials used in this facility shall be completed and kept on location as follows:

(a) VOC, Water & Exempt Compound Content of All Coatings, Inks, Adhesives, Thinners, Cleaners, Solvents and Ancillary Materials – to be determined by using EPA Method 24 analyses to determine volatile matter content, water and exempt compound content (volume %), density, volume solids and weight solids. Data may be obtained by laboratory analysis, from manufacturer or vendor certification that the data was determined by EPA Method 24, or from formulation data provided by the manufacturer.

(b) HAP Content of All Coatings Inks, Adhesives, Thinners, Cleaners, Solvents and Ancillary Materials – for each of these materials, the owner or operator shall determine the organic HAP weight fraction by using EPA Method 311, or the certified results from a manufacturer or vendor EPA Method 311 determination, or the results from formulation data provided by the manufacturer or vendor, or from Material Safety Data Sheets (MSDS), or from Certified Product Data Sheets (CPDS).

The results of these determinations shall be recorded in the following log. This log, the certified product data sheets and the material safety data sheets along with a record of purchase orders and invoices for all VOC and HAP containing materials shall be maintained and kept available for inspection by the Technical Secretary or his representative. These records must be retained for a period of not less than five years. If new materials are used, or if material formulation is changed, the log shall be updated within 90 days from the initial date of usage of the new or altered material.

VOC/HAP/WATER & EXEMPT COMPOUND CONTENT LOG FOR SOURCES 32-0169-01 & 32-0169-04

MATERIAL NAME	MATERIAL DENSITY (pounds MATERIAL per gallon)	WATER & EXEMPT COMPOUND % (% by volume)	VOC CONTENT (pounds VOC per gallon)	HAP ₁ CONTENT (pounds HAP ₁ per gallon)	HAP _p CONTENT (pounds HAP _p per gallon)	TOTAL HAP CONTENT (pounds HAP ₁ thru HAP _p per gallon)
Material ₁						
Material ₂						
Material _i						

Note: $i = 1, 2, 3 \dots n$ = the number of different materials, and $p = 1, 2, 3 \dots m$ = the number of different hazardous air pollutants. Use rows as required for the number of different materials and columns as required for the number of different hazardous air pollutants.

TAPCR 1200-3-9-.02(11)(e)1.(iii)

- E3-4.** This facility is subject to the requirements found in "National Emission Standards for Hazardous Air Pollutants for Paper and other Web Coating" (40 CFR Part 63 Subpart JJJJ). This facility shall not emit more than 10 tons per 12 consecutive months of any single hazardous air pollutant, or 25 tons per 12 consecutive months of any combination of hazardous air pollutants. Compliance with this condition shall insure that the facility meets the definition of an area source under the MACT Rule for Paper and other Web Coating".

40 CFR 63 Subpart JJJJ.

Compliance Method: Compliance with this limitation shall be assured by the recordkeeping requirement in Condition E3-5.

- E3-5.** Emissions of any hazardous air pollutant (HAP) listed in Section 112 of the Federal Clean Air Act shall not exceed 9.9 tons during all intervals of 12 consecutive months. Emissions of any combination of HAPs shall not exceed 24.9 tons during all intervals of 12 consecutive months. In the event that these limits are exceeded, this facility shall comply with all requirements found in 40 CFR 63 Subpart JJJJ- MACT Rule for Paper and other Web Coating.

40 CFR 63 Subpart JJJJ

Compliance Method: The permittee shall keep records in the following format to show compliance with the above limit.

Single HAP log

Month-----

HAP Name	From Source 01 (Log 1 or Log 2)	From Source 04 Log 3	From Clean up Solvents	Each HAP (tons per month)	Each HAP for 12 consecutive months
Toluene					
Formaldehyde					
Glycol ethers, etc.					

Combined HAP Log

Month	Combined HAP emissions for source 01 (from log 1 or log 2)	Combined HAP emissions for source 04 (from log 2)	HAPs from Clean-up solvents	Total HAP emissions from the facility per month (01 +04 + cleanup)	Total HAP emissions for 12 consecutive months

- E3-6.** Regarding recordkeeping of logs, the following is applicable:

- For sources required to maintain monthly logs:
All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required.
- For sources required to maintain weekly logs:
All data, including all required calculations, must be entered in the log no later than seven (7) days from the end of the week for which the data is required.
- For sources required to maintain daily logs:
All data, including all required calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.

TAPCR 1200-3-9-.02(11)(e)1.(iii)

32-0169-01 Source Description: **Faustel Paper and Film Coating Line:** This source includes the Faustel paper and film coating line with heat exchangers, drying ovens and regenerative thermal oxidizer (RTO). The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions are captured within a permanent enclosure. The collected VOC and HAP emissions are controlled by the RTO. The RTO exhausts out of a stack (S05) that is 35 feet above grade with the inside dimension of 4.3 feet. This source has two by-pass stacks (S06 & S07) located at the ovens.

Conditions E4-1 through E4-11 apply to source 32-0169-01.

E4-1. Volatile organic compounds emitted from this source (32-0169-01) shall not exceed 70 tons during all intervals of 12 consecutive months.

TAPCR 1200-3-7-.07(2)

Compliance Method: A log of information in the following format must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log shall be used in the reports required by **Condition E2** of this permit. This log must be retained for a period of not less than five years.

YEARLY VOC/HAP EMISSIONS LOG

MONTH/ YEAR	**VOC EMISSIONS (tons VOC per month) From Log 1 and Log 2	*VOC EMISSIONS (tons VOC per 12 months)	**TOTAL HAP EMISSIONS (tons per month) From Log 1 and Log 2	Total HAP Emissions per (tons per 12 consecutive months)

E4-2. This source is subject to Rule 1200-3-18-.14 Paper and Related Coating; and will comply with the requirements of this rule by the use of one of the following **alternative operating scenarios (AOS)**:

- (a) **AOS #1:** The use of monthly-weighted averaging (i.e., coatings with a VOC content not in excess of 2.9 pounds per gallon of coating, excluding water and/or exempt compounds, as applied, on a monthly weighted average basis), and/or
- (b) **AOS #2:** The use of a capture system and a control device (regenerative thermal oxidizer) with a minimum overall emission reduction efficiency of 95 percent.

TAPCR 1200-3-18-.14(3)

E4-3. This source shall record in a log at the permitted facility the scenario under which it is operating, as described below: A log of information in the following format must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five years.

ALTERNATIVE OPERATING SCENARIO LOG FOR SOURCE 32-0169-01

DATE	TIME	SWITCHED TO AOS #1: Use of monthly weighted averaging.	SWITCHED TO AOS #2: Use of capture system and control device.
(date 1)	(time 1)	√	
(date 2)	(time 2)		√
etc.			

E4-4. Particulate emissions from this source shall not exceed 0.005 grains per dry standard cubic foot (1.35 pounds per day).

TAPCR 1200-3-7-.01(5) and 1200-3-26-.02(9). Agreement letter dated May 19, 2009

Compliance Method: The compliance with this limit is based on EPA AP-42 emission factors (Table 1.4-2) for natural gas combustion. (7.6 pound per million cu.ft of natural gas)

Alternative Operating Scenario #1: Use of monthly weighted averaging.

E4-5. This source (32-0169-01) shall not apply coatings whose weighted average VOC content exceeds 2.9 pounds per gallon of coating, excluding water and/or exempt compounds, as applied, on a monthly weighted average basis.

TAPCR 1200-3-18-.14(3)(a)

Compliance Method: See Condition E4-6.

E4-6. A log of information in the following format must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log shall be used in the reports required by **Condition E2** of this permit. This log must be retained for a period of not less than five years.

LOG 1

MONTH AND YEAR-----

MATERIAL NAME	USAGE (gallons per month)	VOC CONTENT (pounds VOC per gallon) From condition E3-3	VOC EMISSIONS (tons VOC per month)	HAP ₁ CONTENT (pounds HAP ₁ per gallon)	HAP ₁ EMISSIONS (tons HAP ₁ per month)	HAP _p CONTENT (pounds HAP _p per gallon)	HAP _p EMISSIONS (tons HAP _p per month)	TOTAL HAP EMISSIONS (tons HAP ₁ thru HAP _p per month)
Coating ₁								
Coating ₂								
Coating ₃								
Coating _i								
Thinner/Solvent ₁								
Thinner/Solvent ₂								
Thinner/Solvent ₃								
Thinner/Solvent _q								
TOTALS:	X		Y		HAP ₁		HAP _p	

Where: i = 1, 2, 3... n = the number of different coatings/materials;

p = 1, 2, 3... m = the number of different hazardous air pollutants; and

q = 1, 2, 3... r = the number of different thinners/solvents added to coatings;

Use rows as required for the number of different materials and columns as required for the number of different hazardous air pollutants.

EQUATIONS FOR THE MONTHLY VOC/HAP EMISSIONS LOG 1 CALCULATIONS:

1. Coating VOC Emissions (tons VOC per month)

$$= \frac{(\text{Coating}_i \text{ Usage (gallons per month)}) (\text{Coating}_i \text{ VOC Content (lb. VOC per gallon)})}{(2000 \text{ lb/ton})}$$

2. HAP_p Emissions (tons HAP_p per month)

$$= \frac{(\text{Coating}_i \text{ Usage (gallons per month)}) (\text{Coating}_i \text{ HAP}_p \text{ Content (lb. HAP}_p \text{ per gallon)})}{(2000 \text{ lb/ton})}$$

(2000 lb/ton)

3. Thinner/Solvent_q VOC Emissions (tons VOC per month)

$$= \frac{(\text{Thinner/Solvent}_q \text{ Usage (gallons per month)}) (\text{Thinner/Solvent}_q \text{ VOC Content (lb. VOC per gallon)})}{(2000 \text{ lb/ton})}$$
4. Thinner/Solvent_q HAP_p Emissions (tons HAP_p per month)

$$= \frac{(\text{Thinner/Solvent}_q \text{ Usage (gallons per month)}) (\text{Thinner/Solvent}_q \text{ HAP}_p \text{ Content (lb. HAP}_p \text{ per gallon)})}{(2000 \text{ lb/ton})}$$
5. Monthly-weighted average VOC Content Of all Coatings, As Applied (Pounds VOC Per Gallon, excluding water and exempt compounds)

$$= Y/X = [(\text{Monthly VOC emissions (pounds/month)})] / [(\text{Monthly Material Usage (gallons per month)})]$$

Alternative Operating Scenario #2: Use of capture system and control device.

- E4-7. This source (32-0169-01) shall install and operate a capture system (permanent total enclosure) and a control device (regenerative thermal oxidizer (thermal incinerator)) with a minimum overall emission reduction efficiency of 95 percent.

TAPCR 1200-3-18-.14(5)

Compliance Method: See condition E4-8.

- E4-8. When the source relies on the use of a permanent enclosure and thermal incinerator for compliance, the permanent enclosure shall meet the following criteria for total enclosure:

- (a) Any natural draft opening (NDO, as defined under Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure in Appendix B to 40 CFR §52.741) shall be at least four equivalent opening diameters from each VOC emitting point.
- (b) The total area of all NDOs shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.
- (c) The average facial velocity (FV) of airflow through all NDOs shall be at least 200 feet per minute (fpm). The direction of airflow through all NDOs shall be into the enclosure.
- (d) All access doors and windows whose areas are not included in (b) above and are not included in the calculation in (c) above shall be closed during routine operation of the process.
- (e) All VOC emissions must be captured and contained for discharge through a control device.

Compliance Method: Compliance with this condition has been demonstrated by an EPA Method 204 test performed on February 2, 2006, at the facility.

- E4-9. Pursuant to the requirements of the Compliance Assurance Monitoring (CAM) Rule (40 CFR 64), the permittee shall install, calibrate, certify to the Technical Secretary, operate, and maintain continuous monitoring equipment on the Regenerative Thermal Oxidizer (RTO) which shall monitor the combustion chamber temperature at all times when this coating line is in operation. The monitoring equipment shall meet the following requirements:

1. The continuous temperature monitoring equipment shall be equipped with a continuous recorder and have an accuracy of ± 1 percent of the combustion temperature being measured expressed in degrees Celsius, or 0.5°C, whichever is greater.
2. The continuous recorder may be any device, which records the combustion temperature at least four times per hour, at equally spaced intervals.
3. The temperature monitor and recorder shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

Any 3-hour block of time, during which the average combustion zone temperature in the RTO is more than 28°C (50°F) below the average combustion temperature (1686°F) during the most recent emission test (February 2, 2006) which demonstrated that the source was in compliance, shall be considered an excursion.

Reports shall include a sample (one page) from the reporting period that shows the 3-hour block average temperatures. Also, the minimum 3-hour block average temperature value during the reporting period and the date and time period it occurred.

- E4-10.** A log of information in the following format must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log shall be used in the emissions analysis required by **Condition E1** of this permit and in the reports required by **Condition E2** of this permit.. This log must be retained for a period of not less than five years.

TAPCR 1200-3-9-.02(11)(e)1.(iii)

LOG 2

MONTH/YEAR

MATERIAL NAME	USAGE (gallons per month)	VOC CONTENT (lbs VOC per gallon)	Control efficiency 96.9%	VOC EMISSIONS (lbs VOC per month)	HAP ₁ CONTENT (lbs HAP ₁ per pound of VOC)	HAP ₁ EMISSIONS (lbs HAP ₁ per month)	HAP _p CONTENT (lbs HAP _p per pound of VOC)	HAP _p EMISSIONS (lbs HAP _p per month)	TOTAL HAP EMISSIONS (tons HAP ₁ thru HAP _p per month)
TOTAL									

Note: $p = 1, 2, 3, \dots, n$ = the number of different hazardous air pollutants. Use columns as required for the number of different hazardous air pollutants.

EQUATIONS FOR THE MONTHLY VOC/HAP EMISSIONS LOG 2 CALCULATIONS:

- Controlled VOC Emissions (tons VOC per month)

$$= (1 - \text{OERE}) [\text{Material usage (gallons per month)} \cdot (\text{VOC Content (lb. VOC per gallon)})]$$

Where: OERE = overall emissions reduction efficiency

- HAP_p Emissions (tons HAP_p per month)

$$= (\text{VOC emissions}) (\% \text{ HAP content})$$
- Total HAP Emissions (tons HAP per month)

$$= \sum [\text{HAP}_{1..p} \text{ emissions (tons HAP per month)}]$$

- E4-11:** For fee purposes, the products of combustion emitted from this source are:

SO₂ = 0.05 tpy

CO = 7.0 tpy

NO_x = 9.50 tpy

32-0169-04 Source Description: **Magnagraphics Metallized Paper Coating Line:** This source includes the Magnagraphics metallized paper coating line with drying oven and flame treater. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions are exhausted out of the drying oven stack (S02) that is 32.6 feet above grade with the inside dimension of 2 feet. The flame treater is considered an insignificant activity.

Conditions E5-1 through E5-4 apply to source 32-0169-04.

E5-1 Volatile organic compounds emitted from this source (32-0169-04) shall not exceed 16 tons per month and 175 tons during all intervals of 12 consecutive months.

TAPCR 1200-3-7-.01(5) to avoid PSD

Compliance Method: Recordkeeping as required by condition E5-4.

E5-2 VOC content shall not exceed 2.9 pounds per gallon of coating, excluding water and/or exempt compounds, as applied, on a monthly weighted average basis).

TAPCR 1200-3-18-.14(3)(b)

Compliance Method: Recordkeeping as required by condition E5-4.

E5-3. Particulate emissions from this source shall not exceed 0.005 grains per dry standard cubic foot (0.57 pounds per day).

TAPCR 1200-3-7-.01(5) and 1200-3-26-.02(9). Agreement letter dated May 19, 2009

Compliance Method: The potential to emit particulate emissions from this source is less than five tons per year. In accordance with TAPCD 1200-3-9-.04(5)(c)3. and by annual certification of compliance, the permittee shall be considered to meet the monitoring and related recordkeeping and reporting requirements of TAPCR 1200-3-9-.02(11)(e)1.(iii), and the compliance requirements of TAPCR 1200-3-9-.02(11)(e)3.(i).

E5-4. Recordkeeping of VOC emissions and HAP emissions for compliance and fee purposes shall include the following logs. Logs of information in the following format must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. These logs must be retained for a period of not less than five years.

TAPCR 1200-3-9-.02(11)(e)1.(iii)

Log 3

Month/year-----

MATERIAL NAME	USAGE (gallons per month)	VOC CONTENT (pounds VOC per gallon) From E3-3	VOC EMISSIONS (tons VOC per month)	HAP _i CONTENT (pounds HAP _i per gallon) From E3-3	HAP _i EMISSIONS (tons HAP _i per month)	HAP _p CONTENT (pounds HAP _p per gallon) From E3-3	HAP _p EMISSIONS (tons HAP _p per month)	TOTAL HAP EMISSIONS (tons HAP _i thru HAP _p per month)
Coating ₁								
Coating ₂								
Coating ₃								
Coating ₄								
Thinner/Solvent ₃								
Thinner/Solvent ₄								
TOTALS	X		Y					

Where: $i = 1, 2, 3 \dots n$ = the number of different coatings/materials;

$p = 1, 2, 3 \dots m$ = the number of different hazardous air pollutants; and

$q = 1, 2, 3 \dots r$ = the number of different thinners/solvents added to coatings;

Use rows as required for the number of different materials and columns as required for the number of different hazardous air pollutants.

EQUATIONS FOR THE VOC/HAP EMISSIONS LOG 3 CALCULATIONS:

1. Coating VOC Emissions (tons VOC per month)

$$= \frac{(\text{Coating}_i \text{ Usage (gallons per month)}) (\text{Coating}_i \text{ VOC Content (lb. VOC per gallon)})}{(2000 \text{ lb/ton})}$$

2. HAP_p Emissions (tons HAP_p per month)

$$= \frac{(\text{Coating}_i \text{ Usage (gallons per month)}) (\text{Coating}_i \text{ HAP}_p \text{ Content (lb. HAP}_p \text{ per gallon)})}{(2000 \text{ lb/ton})}$$

3. Thinner/Solvent_q VOC Emissions (tons VOC per month)

$$= \frac{(\text{Thinner/Solvent}_q \text{ Usage (gallons per month)}) (\text{Thinner/Solvent}_q \text{ VOC Content (lb. VOC per gallon)})}{(2000 \text{ lb/ton})}$$

4. Thinner/Solvent_q HAP_p Emissions (tons HAP_p per month)

$$= \frac{(\text{Thinner/Solvent}_q \text{ Usage (gallons per month)}) (\text{Thinner/Solvent}_q \text{ HAP}_p \text{ Content (lb. HAP}_p \text{ per gallon)})}{(2000 \text{ lb/ton})}$$

5. Monthly-weighted average VOC Content Of all Coatings, As Applied (Pounds VOC Per Gallon, excluding water and exempt compounds)

$$= Y/X = [(\text{Monthly VOC emissions (pounds/month)})] / [\text{Monthly Material Usage (gallons per month)}]$$

Log 4 YEARLY VOC/HAP EMISSIONS LOG FOR SOURCE 32-0169-04

MONTH/YEAR	VOC EMISSIONS (tons VOC per month)	(*)VOC EMISSIONS (tons VOC per 12 months)	(**)TOTAL HAP EMISSIONS (tons HAP _i thru HAP _p per month)

(*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this log, this value will be equal to the value for tons per month. For the second month, it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed, that is, 6 (2) represents 6 tons emitted in 2 months.

END OF PERMIT NUMBER: 559215

ATTACHMENT 1

**OPACITY MATRIX DECISION TREE for
VISIBLE EMISSION EVALUATION METHOD 9
dated JUNE 18, 1996 amended on September 12, 2005**

Decision Tree PM for Opacity for Sources Utilizing EPA Method 9*

Notes:

PM = Periodic Monitoring required by 1200-3-9-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standards in paragraph 1200-3-5-.01. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PM required.*

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

Typical Pollutants
Particulates, VOC, CO, SO₂, NO_x, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

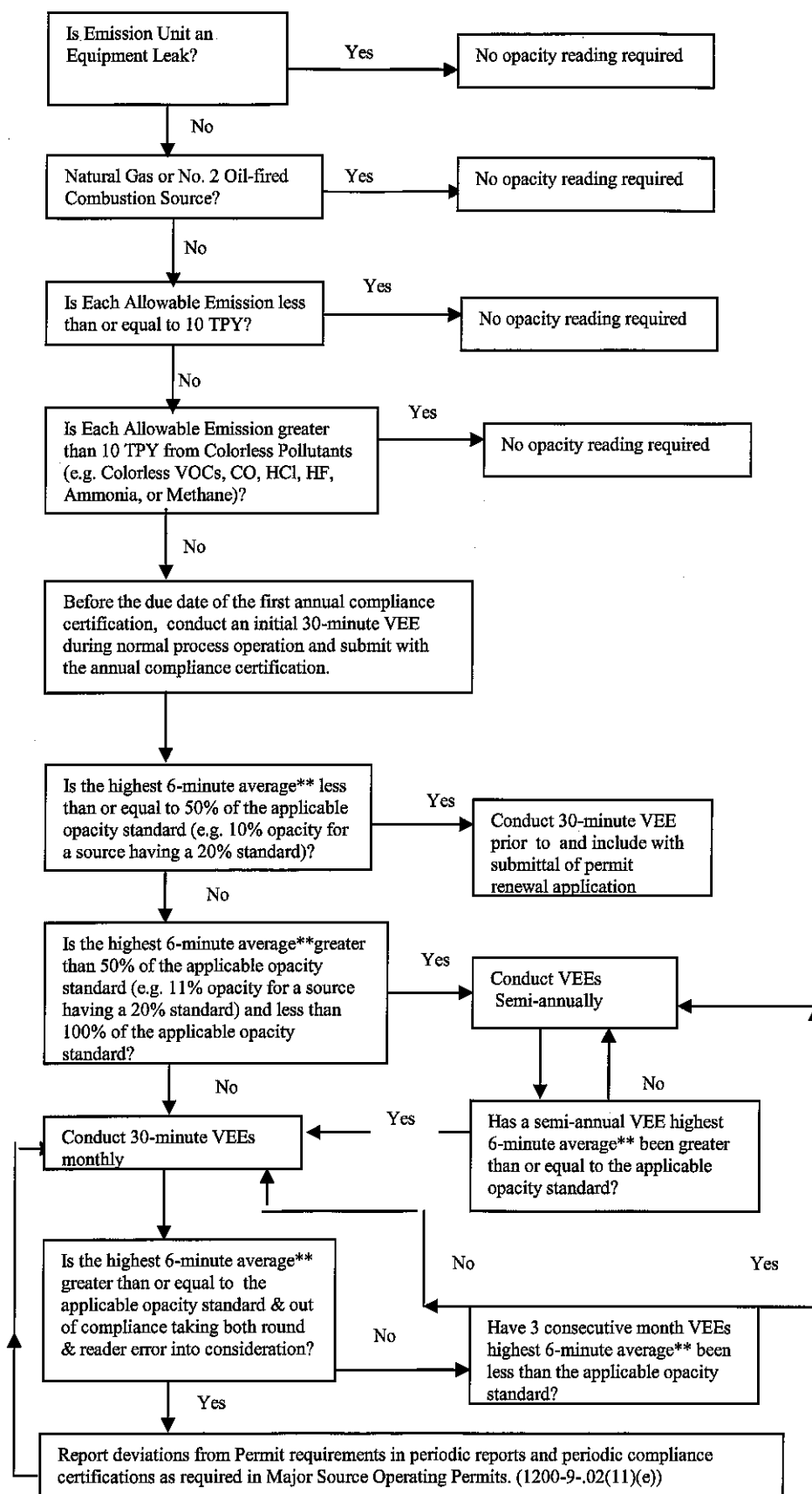
A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error
EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards: The TAPCD guidance is to declare non-compliance when the highest six-minute average** exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

EPA Method 9, NSPS or NESHAPS stipulate opacity standards: EPA guidance is to allow only engineering round. No allowance for reader error is given.

*Not applicable to Asbestos manufacturing subject to 40 CFR 61.142

**Or second highest six-minute average, if the source has an exemption period stipulated in either the regulations or in the permit.



ATTACHMENT 2

Compliance Assurance Monitoring Plan
